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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,438	02/17/2004	Timothy T. Wenzel	2004U002.US	6470

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EXAMINER
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LU, C CAIXIA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/780,438

Applicant(s)

WENZEL ET AL.

Examiner

Caixia Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 6-10, 16-20 and 25-43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 21-24 is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-5, 11-15, and 21-24, drawn to a one-component catalyst composition, classified in class 502, subclass 162.
  - II. Claims 6-10 and 17-20, drawn to a two-component catalyst composition, classified in class 502, subclass 113.
  - III. Claims 25-34, drawn to a polymerization process in the presence of a one-component catalyst composition, classified in class 526, subclass 172.
  - IV. Claims 35-39, drawn to a polymerization process in the presence of a one-component catalyst composition, classified in class 526, subclass 113.
  - V. Claims 40-43, drawn to a process for making catalyst, classified in class 556, subclass 51.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II and inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of catalyst compositions of Groups I and II or polymerization process of Groups III and IV cannot be used together since catalyst composition of Group I is for preparation of olefin polymers with monomodal molecular weight distribution and catalyst composition of

Group II is for preparation of olefin polymers with multimodal molecular weight distribution.

3. Inventions I and III, and inventions of II and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the catalyst can be used in a materially different process such as isomerization or hydrogenation process.

4. Inventions I and V are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the catalyst can be prepared by a different process wherein a pentafluorophenoxide salt is used as starting material rather than trimethylsilyl derivative of the instant claim 40.

5. Inventions II-IV respectively and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the catalyst preparation process of Group V cannot be used to prepare the catalyst composition of Group II and does not have the same functions as the polymerization processes of Groups III and IV.

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6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. Because these inventions are distinct for the reasons given above and the search required for one of the groups is not required for the rest of the groups, restriction for examination purposes as indicated is proper.

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

9. This application contains claims directed to the following patentably distinct species of the claimed invention: various catalyst complex species as listed in claim 11.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

10. During a telephone conversation with Attorney Kevin Faulkner on April 7, 2005 a provisional election was made with traverse to prosecute the invention of Group I wherein the elected catalyst complex is defined by the second structure of claim 11, claims 1-5, 11-15 and 21-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-10, 16-20, and 25-39 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

12. The search results indicate that the catalyst composition limited by the elected species is novel, thus, the search is extended to the other species listed in claim 11,

which is also found to be novel. Currently, the search is extended to any catalyst complex that reads on the generic transition metal complex formula of claim 1.

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At the beginning of claims 21-24 respectively, the term "method" should be replaced with --the metal catalyst compound--.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

16. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Takaoki et al. (US 2003/0069127).

Takaoki teaches catalyst composition comprising a modified support activator (A) and transition compound catalyst (B) in paragraph [0018], wherein the transition compound catalyst (B) can be various dibromide transition metal compounds as listed in paragraph [0211] of pages 20-22. When the dibromide of the metal compounds is replaced with di(pentafluorophenoxide) as shown on page 22, at the end of paragraph

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[0211], Takaoki's di(pentafluorophenoxide) transition metal compounds read on catalyst complex of the instant claims. Therefore, Takaoki's catalyst composition encompasses the instant claims.

***Allowable Subject Matter***

17. Claims 11-15 are allowed.
18. Claims 21-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art such as McConville (US 6,300,439) or McConville et al. (US 6,417,304) teaches a catalyst composition comprising transition metal complex similar to those complexes of the instant claims, however, McConville does not teach or reasonably suggest the "X" group to be a halogenated aryloxy group. Therefore, the subject matter of the instant claims is deemed to be novel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Caixia Lu, Ph. D.  
Primary Examiner  
April 7, 2005